

A2
UNIVERSITY OF YORK
DEPARTMENT OF COMPUTER SCIENCE

User Evaluation

Cohort 2 - Group 13

TAKEN OVER FROM GROUP 16

Group Members:

Carys Hoile
Ivo Hadley
Shravani Baviskar
Alex Kleijwegt
Owen Codrai
Caner Cetinkaya
Haqal Mohammad Nazil

The user evaluation began with identifying the target audience so that the game can be tested on the right demographic, in this case the target demographic is university students or students about to start university. Participants in the same age range were recruited from the computer science cohort. They were then asked to sign a consent form and read an information sheet which specified how their data would be used and that this evaluation was to test the system rather than their own abilities.

The user evaluation took the form of a task-based evaluation and the user was given a scenario which provided context for the use of the game and the evaluation tasks:

“You are a student about to start studying at the University of York in September. You were told about this game by a friend and you want to use this game to get an idea of the campus and key locations. You also want to pass the final exam in the game, and get as high a score as possible to try and beat your friend.”

The user was then asked to complete four different tasks which encompassed all possible interactions on the screens of the game (Main Menu, Credits, Game, Score, Settings, Pause) and gave the user the chance to explore which provided a more authentic experience:

1. You open the game and find that the game is too loud. Can you lower the music and sfx volume.
2. Start the game and try to complete the game while aiming to explore a variety of activities and pass the exam.
 - a. You find that the music is too quiet, can you pause the game and increase the volume of the music
3. Once the game has been completed, can you add the score to the leaderboard to prove to your friend that you beat them.
4. You like the art style of the game and are interested in what tools and assets were used, navigate to the credits screen to look through these and then exit the game.

Remember to get the person to fill out the consent form and read the information sheet.
Non-italicised text is to be given to the user as the scenario and task they are expected to perform.
Italicised text is subtasks to monitor (and possibly prompt). If there are issues with any italicised subtask then write what the issue is and the severity (1-4, 4 is catastrophic, 1 is cosmetic) under the relevant task.

Scenario:

You are a student about to start studying at the University of York in September. You were told about this game by a friend and you want to use this game to get an idea of the campus and key locations. You also want to pass the final exam in the game, and get as high a score as possible to try and beat your friend.

1. While at the main menu, you find that the game sound is too loud, can you lower the music and sfx volume.
 - a. User should be able to successfully navigate to settings button
 - b. User should be able to lower music and sfx settings
 - c. User should be able to navigate back to the main menu

Other Notes
2. You are interested in using this game to learn more about the University of York campus. Try and complete the game while aiming to complete a variety of activities and pass the final exam.
 - a. Sub task - at some point you want to increase the volume of the music again can you do this?
 - i. User should be able to pause the game
 - ii. User should be able to raise the volume of the music
 - iii. User should be able to resume the game
 - b. User should be able to successfully start the game
 - c. User should be able to select an avatar to play with
 - d. User should be able to navigate through the introductory text (either by pressing [SPACE] or [E])
 - e. User should be able to walk around (either using [WASD] or arrow keys)
 - f. User should be able to read signs
 - g. User should be able to navigate to a point of interest and interact with it
 - h. User should be able to select [Yes] to complete the activity and then whichever option they want
 - i. User should not be able to complete any more activities if they are out of energy
 - j. User should be able to go back to the accommodation and sleep for the night

Other Notes
3. Once the game has been completed, you want to add the score to the leaderboard to prove to your friend that you are better than them
 - a. User should be able to successfully add their score to the leaderboard

Other Notes
4. You like the art style of the game and you were interested in what tools and assets were used, navigate to the credits screen to look through these and then return to main menu and exit the game.
 - a. User should be able to navigate back to main menu
 - b. User should then be able to navigate to the credits screen
 - c. User should be able to scroll through the credits
 - d. User should then be able to fully exit the game

Other Notes

Evaluators were provided with a template in Google Docs as shown on the left which prompted them on what to look out for. Each task was accompanied with a selection of atomic hypotheses for the evaluators to use to evaluate the users progress. If the user went quiet at any point in the evaluation, they were prompted to talk about what they were thinking about or trying to do [1]. After the evaluation the user was then asked if they had any final comments or suggestions that the game could use.

Problems that users encountered were scored on a scale of 1-4 where 1 is a cosmetic issue and 4 is a catastrophic problem [2].

The evaluation was run on computers in a lively but not too disruptive atmosphere to simulate the environment where the game would likely be played. These results were then compiled in a table.

Observation/Problem	P1	P2	P3	P4	P5	P6	P7	Final Score
Movement speed too fast	1	0	0	0	0	0	0	1
Issues navigating map - lack of clear signposting	3	2	0	2	3	3	2	15
RCH shouldn't be a food place	1	0	0	0	0	0	0	1
Should have a master volume slider	0	0	0	1	0	0	0	1
Day should end at a set point in time	0	0	0	2	0	0	0	2
Better defined achievements	0	0	0	2	0	0	0	2
Unclear about what keys to press to do what (pause and interact)	0	0	0	0	4	4	0	8
No clear indication that pausing the game is possible	0	0	0	0	4	0	0	4
Lack of variety in tasks to complete	0	0	0	0	3	0	0	3
Player runs out of energy generally by 6:30 (Sleeps too early)	0	0	0	0	2	0	0	2
Meals still called lunch at 4:30	0	0	0	0	1	0	0	1
No indication that text box is automatically being typed in	0	0	0	0	2	0	1	3
Can't view rest of achievements is there are too many to display	0	0	0	0	4	0	0	4
No counter on final screen for eating	0	0	0	0	2	0	0	2
Time moves too quick	0	0	0	0	0	0	2	2
Energy bar same colour as grass	0	0	0	0	0	0	1	1
No indication whether score is good or bad	0	0	0	0	0	0	2	2
Full screen mode not full screen	0	0	0	0	0	0	3	3
Signs around lake don't work (Campus East)	0	0	0	0	0	3	0	3
Map has too much greenspace so is tiring to move around	0	0	0	0	0	1	0	1
Only way to replenish energy is sleep - recreational activity to boost energy needed	0	0	0	0	0	3	0	3

References

- [1] S. Doyle, "My usability template for performing better user testing," *Shanedoyle.io*, 2020. <https://www.shanedoyle.io/post/a-template-for-usability-testing> (accessed May 22, 2024).
- [2] J. R. Lewis, "The System Usability Scale: Past, Present, and Future," *International Journal of Human–Computer Interaction*, vol. 34, no. 7, pp. 577–590, 2018, doi: <https://doi.org/10.1080/10447318.2018.1455307>.